Mass Casualty Response

A Workbook for Emergency Medical Responders in Alaska

Prepared by:

Section of Community Health and EMS
Division of Public Health
Department of Health and Social Services
P.O. Box 110616
Juneau, AK 99811-0616
http://www.hss.state.ak.us/dph/ems/ems_home.htm

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PURPOSE

The purpose of this manual is to encourage EMS personnel to consider how they would respond to a variety of multiple casualty/disaster situations. It is **not** intended to be a reference manual for responders, nor was it designed as an encyclopedia of disaster resources. The manual assumes you are capable of evaluating and treating patients in accordance with your level of training and certification. Because this manual is intended to assist you in managing **resources** and not teach basic patient care, only very basic information about the conditions of patients is provided.

Another purpose of this manual is to encourage EMS personnel to become more comfortable and involved with disaster planning.

Using the Manual

The manual is best used in EMS classes in an environment moderated by an individual knowledgeable in mass casualty/disaster response. This is particularly important in basic EMS classes since the students do not, as a rule, have a background in multiple casualty disaster response. Another advantage of having an instructor/facilitator assist in using this manual is that it allows that individual to "fill in the blanks" in the scenarios to make them more real and locally relevant.

Scenarios have been developed for urban, rural, and wilderness environments. Readers are encouraged to consider each scenario since most disasters will challenge you with components of each.

A current copy of this manual will be maintained on the section's web site at:

http://www.hss.state.ak.us/dph/ems/ems_home.htm

Scenario format:

Introduction:	A brief description of the community and event.
Patients:	Numbers and seventies of patients, by triage category.
Local Resources:	A snapshot of some of the resources available at the local level. The reader should anticipate the resources likely to be found in a community of this size and plan accordingly.
Special Problems:	Challenges or conditions specific to this scenario.

On page 3 there are general questions which should be considered after reading each scenario. Each scenario concludes with specific questions which should be answered.

The initial response of most readers will be "There is not enough information in the scenarios." Our response is "use your imagination! (and your instructor's)." Identify the possibilities and plan for each. Remember, during a disaster or mass casualty incident, you often will have to respond initially with incomplete information. Frequently, success is determined by how well you adapt your response to the situation as new information becomes available.

Definitions

The terms "mass casualty" and "multiple casualty" are used frequently throughout the manual to describe numbers of patients. There is not a universal threshold at which the number of patients causes your scene to go from "multiple" to "mass." Rather, the definitions are dependent on both the number of patients and the resources available. In this workbook, "multiple casualty" usually connotes a situation in which regional resources must be mobilized for response. "Mass casualty" suggests that state and national resources must be mobilized. What is most important, however, is the ability of the reader to develop efficient responses to situations of all sizes and types, not to force a particular scenario into a particular category.

Acknowledgements

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Suggestions & Comments

If you have comments, suggestions for improving it, or wish to contribute scenarios, please contact:

Matt Anderson
Section of Community Health and Emergency Medical Services
Box 110616
Juneau, AK 99811-0616
(907)465-3141/FAX: 465-4101
email: matta@health.state.ak.us
http://www.hss.state.ak.us/dph/ems/ems_home.htm

Reprinting

GENERAL QUESTIONS

Disaster response is necessarily complex. The following questions relate to the "EMT on the scene," not just to personnel at the Emergency Operations Center. Your disaster/MCI plan should allow you to answer the following questions:

1. What are your specific responsibilities in a disaster?
2. Who is responsible for overall disaster planning in your community, how is this person contacted, and where are the plans for disaster response kept?
    a. Does your service have easily accessible materials that allow the first personnel on the scene to implement the incident command system?
3. How will you be notified that a disaster has occurred?
4. Where should you report in a disaster?
5. What is the system for checking in and out of the disaster response area so you are accounted for by incident command staff?
6. What system will be used to identify on-scene command personnel?
7. How will you satisfy yourself that your family and friends will be cared for while you are responding?
8. What command structure will be used?
9. How will you communicate with medical command?
10. Will communication be by radio or by face to face contact?
    a. If by radio, what frequency/channel will you use?
    b. How will you be identified?
    c. How will you communicate with other members of the medical response team?
    d. How will conflicts regarding medical control issues be resolved?
11. What equipment and supplies will be immediately available and what will be arriving later?
    a. What do you have with you that can be used?
    b. How will you request additional equipment and supplies?
    c. How soon do you anticipate receiving additional equipment and supplies?
12. What triage system will be used?
13. What local, regional, state, and national resources should be notified or requested?
    a. Who will make contact and via what means?
    b. What are the estimated times of arrival for incoming resources?
14. Who will be responsible for identifying and staffing an equipment staging area?

15. Who will be responsible for identifying and staffing the patient triage and patient staging areas?
16. How will patients be transported?
17. To where will patients be transported?
18. Who will decide where patients will be transported?
19. If the response will be prolonged, what plans have been made for food, lodging, water, and other essentials?
20. How are "special populations" such as the elderly and those who are receiving home health care being taken care of?
21. How will patients contaminated by hazardous materials be decontaminated?
22. What hospital resources exist for the decontamination and treatment of haz-mat patients?
23. How would the preceding questions be answered differently if the event was possible that the event resulted from a terrorist event.
24. Do you know the signs and symptoms of critical incident stresses and do you know to whom to go for assistance.

SCENARIOS

AUTOMOBILE CRASH IN YOUR COMMUNITY

Introduction:

You are in an EMS organization called to the scene of a collision between a minivan carrying three people and a pickup. Three children were ejected from the bed of the pickup truck on impact. The crash occurred five miles out of town. Law enforcement officials are on-scene.

Patients:	**#**	**Special Needs:**
Red	2	Both are pediatric patients
Yellow	4	
Green	1	
Black	0	

Local Resources:

You should know these best!

Special Problems & Conditions:

None

Specific Questions:

None

HAZARDOUS MATERIALS SPILL WITH INJURIES IN YOUR COMMUNITY

Introduction:

You are in an EMS organization called to the scene of a chlorine tank leaking. There are three patients. Two have walked uphill and are alert but have difficulty breathing. The third patient is visible next to the chlorine tank.

Patients:	**#**	**Special Needs:**
Red	2	Both have respiratory problems
Yellow	0	
Green	0	
Black	0	
Unknown	1	

Local Resources:

You should know these best!

Special Problems & Conditions:

There is no wind and the tank is in an unpopulated area.

Specific Questions:

None

AIRCRAFT CRASH IN YOUR COMMUNITY

Introduction:

You are in an EMS organization and are on call when a 737 crashes while making an emergency landing. Access to the crash site is by road and there are no special hazards known.

Patients:	**#**	**Special Needs**
Red	5	
Yellow	15	
Green	30	
Black	0	

Local Resources:

You should know these best!

Special Problems & Conditions*:*

The outside temperature is 40 F. There is a light rain falling.

Specific Questions:

None

AIRCRAFT CRASH IN A SMALL COASTAL COMMUNITY

Introduction:

You are in an EMS organization in a coastal community of 8,000 people. A 737 crashes while making an emergency landing.

Patients:	**#**	**Special Needs**
Red	3	1 pt. has classic sign of intracranial bleeding
Yellow	12	5 patients have substantial second degree burns
Green	22	
Black	2	

Local Resources:

- Fire department with 30 members, including a 4 person Hazmat team
- ALS ambulance with 20 EMTs
- Hospital with small emergency department and 40 beds

Special Problems & Conditions:

- The community is not connected to other communities by a road system.
- You arrive on scene to find two crewmembers performing CPR on the pilot of the plane.
- The runway is littered with debris.

Specific Questions:

1. How will you notify and prepare for additional resources to come from outside the community?
2. What will be your directions to the rescuers performing CPR?

HOSTAGE STANDOFF AT THE HIGH SCHOOL GYMNASIUM IN YOUR COMMUNITY

Introduction:

You are in an EMS organization and are on call when the local police department dispatch notifies your agency of a hostage standoff at the local high school gymnasium. An update from the police while you are responding reports the gunman has shot several students and turned the weapon on himself. Law enforcement now has the scene secured and it is safe to enter.

Patients:	**#**	**Special Needs**
Red	3	Two have gun shot wounds to the chest
Yellow	5	
Green	4	
Black	1	This is the gunman who was shot by law enforcement personnel

Local Resources:

You should know these best!

Special Problems & Conditions:

None

Specific Questions:

Does your organization have quick access to CISD teams?

EARTHQUAKE IN AN URBAN AREA

Introduction:

You are in an EMS organization serving an urban community on a major highway system. A major earthquake occurred at 2 AM, approximately 10 minutes ago. Buildings in one section of town were particularly hard hit.

Patients:	**#**	**Special Needs**
Red	6	
Yellow	40	
Green	100	
Black	5	

Local Resources:

One well staffed fire department with FD based ALS EMS response.

Special Problems & Conditions:

- You can hear the sounds of several people trapped in a collapsed building.
- The airport is not operational.
- One of the community's hospitals has been damaged and patients must be evacuated.

Specific Questions:

How would respond to the requests for assistance from the trapped persons?

PLANE CRASH IN A REMOTE LOCATION

Introduction:

You are in an EMS organization which is responsible for disaster planning in a small rural community. A commuter aircraft capable of carrying 6 people has been reported overdue in another community 20 miles away.

Patients:	**Special Needs:**
Unknown	Unknown

Local Resources:

- A search and rescue team of 4 people, each with basic first aid training.
- Medical team of 3 ETTs
- 1 primary health aide, 1 alternate health aide

Special Problems & Conditions:

- It is February and the temperature is 10 F. The ground is covered with snow.
- You have approximately 3 hours of daylight remaining.
- The hospital and regional hub is 45 minutes away by aircraft.

Specific Questions:

1. Who do you notify and from whom do you request help?
2. If there are injured patients who must be transported, how will it be done and to what location?
3. What recommendations should you make to the SAR team leaving to search?

VIOLENT CONFRONTATION IN YOUR COMMUNITY

Introduction:

You are in an EMS organization and are called to respond for an assault and battery in front of a local drinking establishment. As you pull up to the scene, you see several patrons lying motionless on the ground. Another stumbles outside and reports a man wielding a knife is stabbing people inside. Law enforcement are responding from outside of town.

Patients:	**#**	**Special Needs:**
Red	5	Two patients are in cardiac arrest
Yellow	3	
Green	3	
Black	0	

Local Resources:

You should know these best!

Special Problems & Conditions:

Law enforcement is at least ten minutes away. The temperature is 15 degrees F.

Specific Questions:

What is your first priority here?

UNKNOWN EXPLOSION IN AN SUBURBAN COMMUNITY

Introduction:

You are in an EMS organization serving a suburban community twenty miles from a major metropolitan city. An unknown type of explosion has been reported at a major political party's headquarters during a campaign speech. The two story building has partially collapsed.

Patients:	**#**	**Special Needs**
Red	8	
Yellow	10	
Green	16	
Black	4	

Local Resources:

- One well-staffed volunteer fire department with 50 members, all with Operations-level Haz-Mat training.
- FD EMS consists of 3 ALS ambulances with a reserve BLS unit. The closest mutual-aid department 10 miles away with one ALS unit.

Special Problems:

Bystanders report unknown number of people trapped in rubble.

Specific Questions:

How will your Incident Command System be structured?

CRUISE SHIP FIRE AT A PORT CITY

Introduction:

You are in an EMS organization and on call when notified that a cruise ship has caught fire. The ship has one physician and two nurses. The ship's sprinkler system has controlled the fire.

Patients:	**#**	**Special Needs:**
Red	7	Two are critical burn patients, three are multiple trauma. One is a 30 year old male in cardiac arrest secondary to trauma. One is a 60 year old male with chest pain.
Yellow	8	6 are trauma patients, two are smoke inhalation patients.
Green	1000	
Black	1	

Special Needs:

Some of these patient were unable to take prescription medications with them.

Local Resources:

- The city has a shipboard firefighting team.
- The city has a 50 bed hospital and is located more than 500 air miles from larger facilities.

Special Problems & Conditions:

- The vessel is at anchor and not at the pier.
- It is daylight, the wind is calm, there is no precipitation, and the temperature is 65 degrees.
- The fire has been controlled and the vessel is not in danger of sinking.
- Your hand held radios do not work on-board the vessel. The vessel has its own UHF radio System.

Specific Questions:

1. Who is in charge? The Captain of the Port, the Fire Chief, or the Captain of the Vessel?
2. What regional resources exist to assist you in your response?
3. How would your response differ if the ship was 15 miles from port?

DISASTER EXERCISE EVALUATION QUESTIONS

The following questions are designed to help you plan and evaluate a disaster exercise. Not all of the questions may be relevant depending upon the type of exercise, (e.g. table top drill, etc.) There may be additional questions which should be included given the scenario and approach you are using for your drill.

1. Were the key individuals and agencies (such as those found on page) involved?

2. Was the drill sufficiently different from previous events to keep interest and response levels high?

3. Did the scenario challenge each agency and individual involved?

4. Was the scenario realistic and were responses as real as possible?

5. Was the scenario staged in a safe manner?

a. Were there designated Safety Officers?

b. Did each person know what to do if a real emergency were to occur during the drill?

6. Was there an adequate number of patients and were they moulaged appropriately?

7. Was there a sufficient number of qualified evaluators?

8. Was there a formal critique, such as a post event meeting, which allowed input from all sources?

    a. Was there a system for allowing comments from those who were not available during any formal critique?

    b. Is there a plan to use the evaluations to improve future drills and responses?

9. Was there a plan to account for all patients, evaluators, and rescuers following the drill?

10. Were on-scene communications effective?

11. What were the strengths, weaknesses, and recommendations for improvement for each of the components of the drill's incident command structure?

12. Was the media allowed to participate?

THE INCIDENT COMMAND SYSTEM

Contributed by Lt. David Hull, Ketchikan Fire Department

The Incident Command System (ICS) brings into play a process of organizing an emergency scene to use the available resources, including response personnel, in the most efficient way feasible under the circumstances. ICS improves communication on scene and helps to reduce scene stress. Most importantly perhaps, ICS produces a safer scene environment. The end result is a higher quality response and ultimately better care being administered to the patient.

The function of the ICS system is simple. Situation specific information and needs are conveyed to a centralized command location. At this command location, the information is received is analyzed and compared with the information received from other segments of the overall incident. Using that compiled information, decisions are made regarding the next best step in the stabilization process. Sound complicated? It isn't. A system of organization and use of skills and equipment is a primary component of any emergency response training. Yours will be no exception. Your training requires that you evaluate information gathered from many sources and make the right decisions. The Incident Command System builds on this training by providing you with a system to deal with large or escalating events. ICS training will show you how to integrate the additional personnel and equipment which will be responding to the request for help.

ICS is not new. It was developed in the early 1970's as a tool to locate and bring together a vast array of equipment and personnel to fight large wildland fires. The beauty of the system lies in its versatility. ICS allows the scene to be coordinated in a such a way that individuals are responsible for a portion of an event, so they do not have to consider necessarily the entire scene. This leaves the remaining personnel free to concentrate on other tasks. No scene is too small or too big to use the concepts of the Incident Command System. If put into place during the early stages of the incident, ICS will be up and running if the situation suddenly turns ugly. Trust me, it always happens suddenly.

ICS is tailor made for use in EMS. From spinal immobilization to triage, all skills require that someone take charge. This is reinforced in every EMS class taught.

The secret to successfully using the Incident Command System is to implement it on every scene, expanding and contracting it as needs dictate.

The Incident Command System has proved its worth on large and small events. It provides the EMT with a solid foundation for identifying and integrating resources. All EMS providers are encouraged to learn more about ICS and its role in their particular system.

Editor's Note: The Section of Community Health and EMS strongly recommends that EMTs take additional training in the Incident Command System. Understanding how you will fit into a coordinated response is a prerequisite to success in an MCI or disaster situation. In 1997, the NIIMS ICS became the official ICS system for use by state agencies in Alaska. This system is also used by many of the military and civilian

organizations which have disaster response capabilities.

COMMON PITFALLS IN DISASTER RESPONSE

The following recommendations are paraphrases of conclusions developed by Paul Anderson, an EMS consultant based in Lincoln, Nebraska, in a paper titled: ***A Comparative Analysis of the Emergency Medical Services and Rescue Response to Eight Airliner Crashes Occurring in the United States During the Period of 1987-1991.*** The paper was presented at the World Congress on Emergency and Disaster Medicine, Stockholm, Sweden, June 22,1993.

Recommendations:

- Emergency agencies should increase their use of the Incident Command System, including joint use when multiple agencies are involved in a single response.
- In large incidents, the crash site should be divided into sectors and, in addition to the appointment of an overall Triage Officer, Triage Officers should be appointed for each of the identified sectors.
- Each airport should have rapid access to a quantity of backboards equal to the passenger capacity of the largest aircraft using the airport on a regular basis.[1]
- Ensure that triage and treatment areas are clearly visible at aircraft crash scenes.
- Formally arrange, as part of the pre-planning process, for the transportation of the walking wounded, and non-injured persons.
- Ensure that notification of airport security is part of the response and that security staff have well define roles to help expedite emergency response.
- Pre-plan for the high noise levels which may impair radio communications. Explore the use of head sets for emergency personnel and the removal of large, non-essential vehicles from the scene.
- Ensure that adequate lighting will be available for on or off airport crash responses.
- Limit involvement of non-essential airline employees to the crash site.
- Ensure there is adequate heavy extrication equipment available.
- Ensure there are sufficient ground transport units available, using memoranda of agreement, and mutual aid agreements when necessary.
- Plan for the use of air-medical evacuation resources.

RECOMMENDATIONS ARISING FROM OKLAHOMA CITY BOMBING

Mark Robison and Melissa Webster were among the first rescue workers to arrive at the Alfred P. Murrah Building after the bomb exploded. The attack killed 168 people and injured more than 500. They made the following six recommendations to Congress arid members of the Federal Emergency Management Agency:

- Ensure that command structure personnel attend a disaster management course and provide guidelines for minimum attendance for each emergency response agency;

- Set a minimum number of training hours per employee, concentrating on disaster management, and as an agency, participation in a minimum number of practical drills with other disaster response organizations.

- Ensure that command structure personnel understand state and federal services that are available and how to request those services in a disaster response;

- Develop a standard for mass casualty/disaster response that includes equipment availability, amount of training and amount of disaster planning and rate emergency response organizations based on their readiness;

- Develop a critical incident stress debriefing program that would offer services to rescue workers who are emotionally shaken by their work; and

- Implement a system by which all local emergency response organizations can use one common radio frequency.

DISASTER EXERCISE TYPES

The following are types and descriptions of disaster/multiple casualty drills which may be performed by your organization. The list is intended to tailor your planning process to your available time, money, and staff resources.

Simple Drill	A single agency or unit functioning towards a single goal (practicing triage without performing treatment, communications, etc.).
Multiple Agency Drill	Multiple agency or units practicing together without the need for an Emergency Operations Center (although there should be an on-scene command post). Examples include mass casualty incidents, and hazardous materials exercises.
Table Top Drill	Typically, an EOC exercise with input provided by one or more individuals. These drills are usually not performed in real time.
Functional Drill	An EOC exercise, performed in real time, in which input is provided from multiple sources outside the immediate area. This type of exercise is more realistic and involved than a table top drill.
Full Scale Drill	All players involved, including on-scene command, EOC, and functional units such as fire, EMS, law enforcement, hospitals, public works, etc.

ANCHORAGE METROPOLITAN MEDICAL STRIKE TEAM

The Anchorage Metropolitan Medical Strike Team (AMMST) is the field component of a developing Metropolitan Medical Strike Team System designed to mitigate the potentially disastrous results of a nuclear, biological or chemical (NBC) attack on the infrastructure or citizens of the Municipality of Anchorage. The team is built around the Anchorage Fire Department's 47 member Hazmat Response Team with the addition of paramedic and law enforcement personnel.

AMMST members are trained for specific tasks related to the mitigation of an NBC event. These include event recognition, agent detection, patient decontamination and prehospital medical intervention. Core Hazmat Team members are trained to an NBC-Hazmat Technician level, paramedics are trained to an NBC-Operations and EMS-Technician level and selected police officers are trained to the NBC-Operations level. As a component of the AMMST System, local hospital emergency department personnel are receiving NBC-Hospital Provider training.

A cache of specialized detection equipment will be maintained for the use of the AMMST should the need arise. In addition, a cache of medication will be maintained for those specific chemical and biologic agents that respond to antidotal or prophylactic treatments.

Although the AMMST is not designed to be deployable outside of the Municipality of Anchorage, the Anchorage Fire Department will continue its tradition of assisting other communities, as able, if requests are received for assistance.

The AMMST is scheduled for response availability by December 31, 1998.

MILITARY RESOURCES

Military organizations are essential resources in disaster planning and operations. The military have well trained and equipped personnel and a wealth of experience in all facets of an incident command system and disaster response.

However, training for their primary missions may take military resources out of state for extended periods of time, possibly making them unavailable in the event of a disaster.

Make sure that you are not overly reliant on any one resource and that you have alternate plans if the resource is unavailable.

You should also be aware of the process by which military resources and other federal assets are identified, contacted and authorized to respond to a multiple casualty incident.

KEY DISASTER RESPONSE ORGANIZATIONS

The following is a list of organizations which may be participants in a mass-casualty or disaster response. There may be relevant agencies which are not listed. There also may be agencies listed which will not be called upon. The primary purpose of this list is to allow the reader to ensure he, or she is considering the roles of the major response agencies. Contact information can be found in the ***Alaska EMS Directory*** available through the Section of Community Health and EMS or its web site at http://www.hss.state.ak.us/dph/ems/ems_dir.htm.

Some military assets will be requested through appropriate channels, and some resources, particularly those related to the Department of Defense, will be identified, contacted and authorized at the time of the event.

The responsibilities of the organizations are usually delineated in by local, state or federal law.

Local

Rescue/EMS Squad
Fire Department
Police Department
Hospital
Public Works
Private Utilities
Public Transportation

Regional

Agencies with mutual aid agreements
Critical Incident Stress Debriefing Teams
HAZ-MAT Teams
Urban Search and Rescue

State

Department of Military & Veterans Affairs
    Division of Emergency Services
Department of Environmental Conservation
Department of Public Safety Alaska State Troopers
Department of Health & Social Services
    Division of Public Health Emergency Medical Services Section
Alaska Tsunami Warning Center Department of Natural Resources
Division of Forestry
Bureau of Land Management

Air-medical services which have signed mutual aid agreements
Anchorage Based Disaster Medical Assistance Team[1]
Governor's Office

National/Federal

American Red Cross
Federal Emergency Management Agency National Disaster Medical System
Military/Uniformed Services Public Health Service Army
Fort Wainwright
Air Force
Elmendorf AFB
Federal Bureau of Investigation
Department of Justice
Rescue Communications Center
Eielson AFB
Navy
Marine Corps
Coast Guard
Rescue Coordination Center, Juneau National Guard
210th Air Rescue (Kulis AFB, Anchorage)
Agency for Toxic Substances and Disease Registry (ATSDR)
Chemical Transport Emergency Center (CHEMTREC)
National Park Service
National Earthquake Information Center
National Transportation Safety Board
U.S. Forest Service
Assorted federal "strike teams" identified, contacted and authorized through the Department of Defense

[1] This team is being developed with assistance from many organizations. The date on which the team will become operational is not known.

TIME FRAMES FOR RESPONSES

When developing your responses to the scenarios, you should be realistic about the time it takes for organizations to mobilize in response to a disaster or mass casualty as well as the time it takes to physically move resources into the disaster area. Some resources, particularly those located outside Alaska, may take at least 24 hours to arrive.

Importantly, you must take into consideration the notification process for the resource and the prerequisites for the resource to be made available to you (this is particularly important with military resources).

FREQUENTLY USED ACRONYMS

ADES	Alaska Division of Emergency Services
ATWC	Alaska Tsunami Warning Center
ALS	Advanced Life Support
BLS	Basic Life Support
CAP	Civil Air Patrol
CISD	Critical Incident Stress Debriefing
CISM	Critical Incident Stress Management
COTP	Captain of the Port
CW	Chemical Weapon
CB	Chem-Bio
DEC	Department of Environmental Conservation
DMAT	Disaster Medical Assistance Team
DMORT	Disaster Mortuary Assistance Team
EMT	Emergency Medical Technician
EOC	Emergency Operations Center
EHS	Extremely Hazardous Substance
EMS	Emergency Medical Services
FD	Fire Department
FEMA	Federal Emergency Management Agency
FOSC	Federal On-Scene Coordinator
IAP	Incident Action Plan
ICS	Incident Command System
LEPC	Local Emergency Planning Committee
LEPD	Local Emergency Planning District
MMRS	Metropolitan Medical Response System
MMST	Metropolitan Medical Strike Team
MSO	Marine Safety Office
NBC	Nuclear, Biological and Chemical Weapons (replaced largely by WMD)
NDMS	National Disaster Medical System
NIIMS	National Interagency Incident Management System
NTSB	National Transportation Safety Board
OCS	On-Scene Coordinator
PPE	Personal Protective Equipment
RCC	Rescue Communications Center or Rescue Coordination Center
SAR	Search and Rescue
SERC	State Emergency Response Commission
SOSC	State On-Scene Commander
START	Simple Triage and Rapid Treatment
USAR	Urban Search and Rescue

GLOSSARY

Alert	Informs people of impending danger.
ADEC	Alaska Department of Environmental Conservation.
ADES	Alaska Division of Emergency Services.
ADF&G	Alaska Department of Fish and Game.
ARC (American Red Cross)	The national organization with a congressional mandate to undertake the relief of persons suffering from disaster.
AST	Alaska State Troopers.
Avalanche	A mass of sliding snow occurring in mountainous terrain where snow is deposited on slopes of 20 degrees or more.
CAMEO (Computer Aided Management of Emergency Operations)	Computer program developed by NOAA used to track data required under Title III of SARA.
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980.
CHEMTREC (Chemical Transportation Emergency Center)	Operated by the Chemical Manufactures Association. Provides information and/or assistance to emergency responders. Can be reached 24 hours a day by calling 800-424-9300.
CISPRI	Cook Inlet Spill Prevention and Response, Inc.
Civil Disorder	Terrorist attack, riot, violent protest, demonstrations, illegal assembly.
Cold Zone	The clean area outside of the contamination control line. Equipment and personnel are not expected to become contaminated in this area. This is the area where resources are assembled to support the hazardous materials release response.
Community Emergency Manager	The individual who has the primary day-to-day responsibilities for emergency management programs and activities, and coordinates a jurisdiction's mitigation, preparedness, response, and recovery activities.
Contamination Reduction Corridor	That area within the Warm Zone where the actual decontamination is to take place.

CPCS (Common Program Control Station)	An element of the Emergency Alert System. The primary broadcast station in each operational area assigned the responsibility for coordinating the broadcasting of common emergency public information in that area.
Damage Assessment	The appraisal or determination of the actual effects resulting from a disaster emergency. This estimate serves as the basis for the Governor's request for a Presidential Disaster Declaration.
Disaster	Occurrence or imminent threat of wide spread or severe damage, injury, or loss of life or property resulting from a natural or man-made cause including: a. fire, flood, earthquake, landslide, mudslide, avalanche, wind driven water, weather condition, tsunami, volcanic activity, epidemic, air contamination, blight, infestation, explosion, riot, or shortage of food, water, fuel, or clothing. b. the release of oil or a hazardous substance; if the release requires prompt action to avert environmental danger or damage; and c. equipment failure, if the failure is not a predictably frequent or recurring event or preventable by adequate equipment maintenance or operation (AS 26.23.900).
Disaster Emergency	The condition declared by proclamation of the governor or declared by the principal executive officer of a political subdivision to designate the imminence or occurrence of a disaster. (AS 26.23.900).
DRC (Disaster Recovery Center)	An office established in the disaster area where individual disaster victims may receive information concerning available assistance and apply for programs for which they are eligible. The DRC will house representatives of the Federal, State and Local agencies which deal directly with the needs of individual victims.
Drought	Prolonged period without rain.
Earthquake	A sudden motion of the ground which may cause surface faulting (ground rupture) ground shaking, and ground failure.
EAS (Emergency Alert System)	Consists of broadcasting radio; television; cable stations; and interconnecting facilities which have been authorized by the Federal Communications Commission to operate in a controlled manner during emergencies.

EHS (Extremely Hazardous Substance)	In the text of SARA, Title III, EHS means any substance contained within the list of substances published by the Administrator of the U.S. Environmental Protection Agency. Otherwise known as the 302 Extremely Hazardous Substance List.
EOC (Emergency Operations Center)	Facilities designated for use by governments to direct and manage disaster emergency operations.
Enemy Attack	Hostile action taken against the U.S. by foreign forces resulting in the destruction of military or civilian targets or both.
Energy Shortages	Shortage or interruption of vehicle fuel, heating oil, natural gas, or disruptions of electrical power.
EPA (Environmental Protection Agency)	The federal agency responsible for regulating air, water, hazardous waste, pesticides, and toxic substances.
EPCRA	Emergency Planning and Community Right-to-Know Act of 1986.
Evacuation	The removal of potentially endangered, but not yet exposed, persons from an area threatened by a hazard. Entry into the evacuation area should not require special protective equipment.
Facility Emergency Coordinator	Facility representative for each Title III 302 facility with an EHS in a quantity exceeding its threshold planning quantity (TPQ), who participates in the emergency planning process for that site.
FCO (Federal Coordinating Officer)	The person appointed by the President to coordinate federal assistance in an emergency or disaster.
FEMA (Federal Emergency Management Agency)	Agency established to oversee federal assistance to local government in the event of major disasters. Also administers the Emergency Management assistance program, which provides emergency management funds to local governments through the states.
Fire	**Wildland** - Any instance of uncontrolled burning in grasslands, brush, or woodlands. **Structural** - Uncontrolled burning in residential, commercial, industrial, or other properties in developed areas.

Flood	**Flash** - Quickly rising small streams after heavy rain or rapid snow melt. **Riverine** - Periodic overbank flow of rivers and streams. **Urban** - Overflow of storm sewer system usually due to poor drainage, following heavy rain or rapid snowmelt. **Coastal** - Flooding along coastal areas associated with severe storms, hurricanes or other events.
FOSC (Federal On-Scene Coordinator)	Federal employee responsible for coordinating the on scene federal response to a hazardous materials incident. The FOSC will usually be a member of the U.S. Coast Guard or the Environmental Protection Agency.
Hazard	Any situation or condition that has the potential of causing injury to people or damage to property.
Hazardous Materials Incident	Uncontrolled or unlicensed release of hazardous materials during storage or use from a fixed facility or during transport outside a fixed facility that may impact the public health, safety, and/or environment.
HAZ-MAT (Hazardous Material)	Any material which is explosive, flammable, poisonous, corrosive, reactive, or radioactive, or any combination, and requires special care in handling because of the hazards it poses to public health, safety, and/or the environment.
HAZWOPER (Hazardous Waste Operations and Emergency Response)	Federal safety and health standards promulgated for hazardous waste operators and emergency response personnel by the Occupational Safety and Health Administration (OSHA) as authorized in SARA, Title I; otherwise known as 20 CFR 1910.120 final rule.
Hot Zone	That area immediately around a hazardous materials release. That area where contamination does or could occur. The innermost of the three zones of a haz-mat site. Special protection is required for all personnel while in this zone.
IAP (Incident Action Plan)	The Incident Action Plan, which is initially prepared at the first Planning Meeting, contains general control objectives reflecting the overall incident strategy, and specific action plans for the next operational period. The Incident Action Plans will have a number of attachments. All incidents require an action plan. For simple incidents the action plan is not usually in written form. Large or complex incidents will require that the action plan be documented in writing.

IC (Incident Commander)	The individual responsible for the management of all incident operations.
ICP (Incident Command Post)	Facility where the incident commander, responders, and technical representatives can make response decisions, deploy resources, and handle communications.
ICS (Incident Command System)	System which provides effective incident management through the combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure to effectively accomplish stated objectives pertaining to an incident.
IMT (Incident Management Team)	A management team organized within the Incident Command System to effectively achieve stated incident objectives utilizing the five management functions required for response to all hazard, all risk incidents.
Incident	An occurrence or event, either human-caused or natural phenomena, that requires action by emergency service personnel to prevent or minimize loss of life or damage to property and/or natural resources.
Integrated Emergency Management System	A broad, all hazard emergency management system which encompasses all the various types of emergencies, and addresses mitigation, preparedness, response, and recovery activities. It encourages the development of the common management functions required for response to emergencies of all types.
JIC	Joint Information Center .
Landslide	A mass of sliding mud or rocks.
LEPC (Local Emergency Planning Committee)	The committee appointed by the Alaska State Emergency Response Commission, as required by Title III of SARA, AS 26.23.073, to perform local emergency planning and community right-to-know activities. Committees are appointed in each planning district in the state and are required to have representation from a variety of groups.
LEPD (Local Emergency Planning District)	The geographical area designated by the Alaska State Emergency Response Commission as the area in which plans must be developed for response to all disasters.

Local Government	Any county, city, village, town, district, or other political subdivision of any State, Indian tribe or authorized tribal organization, or Alaska Native village or organization and includes any rural community or unincorporated town or village or any other public entity for which an application for assistance is made by a State or political subdivision thereof. (42 USC 5122)
LOSC (Local On-Scene Coordinator)	The designated community emergency coordinator under the local emergency response plan (LERP). Where no LERP exists, the police or fire chief or other emergency services official will serve as the LOSC.
MAC Group	A Multi-agency Coordination (MAC) group is a group of agency administrators who come together when the character and intensity of the emergency situation significantly impacts or involves other agencies for the intended purpose of improving interagency coordination at the top management level by the execution of the following duties: Setting priorities, acquiring or allocation of resources, coordinating State and Federal disaster designations, providing a political interface with the incident activity, and coordinating information to other agencies and the public.
MBO (Management By Objectives)	Top down management so that all involved know and understand the objectives of the operation.
MSDS (Material Safety Data Sheet)	Written or printed material concerning hazardous chemicals, including the manufacturer's name, the chemical's synonyms, trade name, chemical family, hazardous ingredients, physical data, fire and explosion hazard data, health hazard data, reactivity data, spill or leak procedures, special protection information, and special precautions.
NAWAS (Nation Warning System)	The Federal portion of the Civil Defense Warning System, used for the dissemination of warning and other emergency information from Federal and State warning points. It is a dedicated, nationwide, party-line telephone system operated on a 24-hour basis.
NIIMS (National Interagency Incident Management System)	A common system consisting of five major sub-systems that collectively provide a total systems approach to all risk incident management. The sub-systems are: - The Incident Command System - Standardized training - Qualifications and certification system - Publications management - Supporting technologies

NRT (National Response Team)	Is the national body responsible for coordinating Federal planning, preparedness, and response actions related to oil discharges and hazardous substance releases.
NOAA	National Oceanic and Atmospheric Administration.
NWS	National Weather Service.
OEM (Office of Emergency Management)	A branch of the municipal government responsible for the preservation of life and property in the event of a natural or man-made disaster emergency by making maximum use of municipal resources.
OSHA (Occupational Safety and Health Administration)	Part of the U.S. Department of Labor. OSHA develops and enforces federal standards for occupational safety and health.
PIO (Public Information Officer)	A member of the command staff, is responsible for the formulation and release of information about the incident to the news media and other appropriate agencies and organizations.
Political Subdivision	A municipality; an unincorporated village; or another unit of local government. (AS 26.23.900)
PPE (Personal Protective Equipment)	That equipment and clothing required to shield or isolate personnel from chemical, physical, and biological hazards.
RCRA	Resource Conservation Recovery Act of 1976.
RPOSC (Responsible Party On-Scene Coordinator)	Company employee responsible for coordinating the on-scene responsible party response to a hazardous materials incident. The RPOSC will usually be an employee of the company causing the spill or the designated contractor to the spiller.
Safe Refuge Area	An area within the contamination reduction zone for the assemblage of individuals who are witnesses to the hazardous materials incident or who were on site at the time of the spill. This assemblage will provide for the separation of contaminated persons from non-contaminated persons.
Salvation Army (The)	A religious and charitable organization, that in the event of a major disaster, mobilizes its personnel and resources to provide assistance to disaster victims and workers. Other aid provided includes food, clothing, shelter, and other needs as indicated.

SARA (Superfund Amendments and Reauthorization Act of 1986)	Title I deals with health and safety issues for hazardous waste workers and emergency response personnel. Title III deals with emergency planning and community right-to-know provisions. Also know as the Emergency Planning Community Right-to-Know Act (EPCRA).
SCO (State Coordinating Officer)	The representative of the Governor who coordinates State, Commonwealth, or Territorial response and recovery activities with those of the Federal Government.
SERC	State Emergency Response Commission.
SPCC PLAN	Spill Prevention, Control, and Countermeasures Plan.
SOSC (State On-Scene Coordinator)	State employee responsible for coordinating the on-scene state response to a hazardous materials incident. The SOSC will usually be a member of the Alaska Department of Environmental Conservation.
Support Zone	The clean area outside of the contamination control line. Equipment and personnel are not expected to become contaminated in this area. This is the area where resources are assembled to support the hazardous materials operations.
Title III	The Emergency Planning and Community Right-to-Know Act of 1986 which specifies requirements for organizing the planning and community right-to-know process at the state and local level. See SARA previous page.
Transportation Accident	An accident involving passenger air, highway, rail, or marine travel resulting in death or injury.
Triage	The screening and classification of sick, wounded, or injured persons to determine priority needs in order to ensure the efficient use of medical personnel, equipment and facilities.
Tsunami	Series of traveling ocean waves of great length and long period usually generated by submarine geophysical displacement. May or may not be preceded by an earthquake.
Unified Command	A command structure which provides for all agencies who have jurisdictional responsibility for the incident, either geographical or functional, to jointly manage an incident through a common set of incident objectives, strategy, and priorities.
USCG	United States Coast Guard.

Volcano	An eruption from the earth's interior producing lava flows or violent explosions issuing rock, gases and debris.
Warm Zone	That area between the Hot Zone and the Cold Zone. This zone contains the personnel decontamination station. This zone may require a lesser degree of personnel protection then the Hot Zone. This area separates the contaminated area from the clean area and acts as a buffer to reduce contamination of the clean area.
Warning	Notifies people of the imminent impact of a specific hazard, and protective actions which should be taken.
Weather Extremes	Severe weather includes ice storm, blizzards, extreme cold, drought, and high winds.

ADDITIONAL INFORMATION AND RESOURCES

RESOURCE DIRECTORIES

Alaska EMS Directory

Section of Community Health and EMS
Division of Public Health
Department of Health & Social Services
Box 110616
Juneau, AK 99811-0616
http://www.hss.state.ak.us/dph/ems/ems_dir.htm

BOOKS

Rural Major EMS Incident, Scene Management Manual
Paul B. Anderson
Lincoln Medical Education Foundation
Lincoln, Nebraska

Disaster Response, Principles of Preparation and Coordination
Erik Auf der Heide
Mosby Press
11830 Westline Industrial Drive
St. Louis, MO 63146

ISBN: 0-8016-0385-4

MAGAZINES

Journal of Prehospital and Disaster Medicine
jems Communications
P.O. Box 2789
Carlsbad, CA 92018
(619)431-9797

AUDIOVISUALS

Rural Major EMS Incident, Scene Management Videotape
Paul B. Anderson
Lincoln Medical Education Foundation
Lincoln, Nebraska